

Claims Appendix

1. A method for inducing a cellular immune response to a target peptide that is non-immunogenic in a mammalian subject and that is expressed by tumor cells of the mammalian subject, comprising administering to the mammalian subject an amount of a therapeutic antigen effective to induce a cellular immune response to the target peptide, wherein the therapeutic antigen comprises an immunogenic portion having an MHC-binding domain which binds to the major histocompatibility complex (MHC) and an immune recognition domain which is recognized by T-cells, and wherein the therapeutic antigen is derived from the target peptide such that the MHC-binding portion binds to MHC with a greater affinity than the target peptide without material alteration of the immune-recognition portion, thereby inducing a therapeutically effective cellular immune response to the target peptide in the mammalian subject.
- 2.) The method of claim 1, wherein the target peptide and the immunogenic portion of the therapeutic antigen each consist of from 8 to 14 amino acids.
3. The method of claim 1, wherein the therapeutic antigen further comprises a sorting signal for directing trafficking of the therapeutic antigen to the endoplasmic reticulum.
4. The method of claim 3, wherein the target peptide and the immunogenic portion of the therapeutic antigen each consist of from 8 to 14 amino acids.
5. The method of claim 1, wherein the therapeutic antigen is administered by administration of a nucleic acid encoding the therapeutic antigen, which nucleic acid is expressed in the mammalian subject.
6. The method of claim 5, wherein the target peptide and the immunogenic portion of the therapeutic antigen each consist of from 8 to 14 amino acids.
11. The method of claim 1, wherein the target peptide binds to HLA-A*0201.
12. The method of claim 1, wherein the target peptide is a self-peptide expressed in normal and tumor tissues of the mammalian subject.
13. The method of claim 12, wherein the target peptide derived from is gp75.
14. (allowable) The method according to claim 13, wherein the therapeutic antigen has the sequence TAYRYHLL (Seq. ID No. 12).

16. The method of claim 1, wherein the target peptide is a Herpes simplex glycoprotein B peptide and the therapeutic antigen is SSIEFARL (Seq. ID No. 10).